



## NASA Weekly Update

Week of June 5 - 9, 2006

**6-5-06: NASA Announces Distribution of Constellation Work:** On June 5, NASA announced agency center responsibilities associated with the Constellation Program for robotic and human moon and Mars exploration. This distribution of work across NASA's centers reflects the agency's intention to productively use personnel, facilities and resources from across the agency to accomplish the Vision for Space Exploration. In addition to primary work



*An Earth Departure Stage, docked to the Crew Exploration Vehicle, fires its engine to leave Earth's orbit.*

assignments each center will support moon and Mars surface systems conceptual designs. Centers also support additional Constellation program and project activities. For information about the Constellation Program and a detailed listing of the work assignments at each the center, visit:

<http://www.nasa.gov/constellation>.

**6-6-06: NASA Names Hairston Acting Assistant Administrator for Education:** NASA Deputy Administrator Shana Dale on Friday named John M. Hairston, Jr., as acting assistant administrator for the agency's education office. Hairston is the director of the external programs directorate at the agency's

Glenn Research Center in Cleveland. Hairston succeeds Angela Phillips Diaz, who recently became the new director of Strategic Communications and Development for the Ames Research Center, Moffett Field, Calif.

**6-6-06: First Images from NASA's CloudSat have Scientists Sky High:** The first images from NASA's new CloudSat satellite are already revealing never-before-seen 3-D details about clouds. Mission managers tested the flight and ground system performance of the satellite's Cloud-Profiling Radar in late May, and found it to be working perfectly. For more information on CloudSat and to view the satellite's first images on the Web, visit: <http://www.nasa.gov/cloudsat>.

**6-7-06: NASA Partners in American Indian Science and Engineering Education:** NASA and the American Indian Higher Education Consortium (AIHEC) announced the launch of the NASA AIHEC Summer Research Experience Program. The program is a strategic approach to inspire young American Indians to pursue careers in science and engineering. For information about the American Indian Higher Education Consortium, visit: <http://www.aihec.org>.

**6-7-06: NASA's Fuse Finds Infant Solar System Awash in Carbon:** Scientists using NASA's Far Ultraviolet Spectroscopic Explorer, or FUSE, have discovered abundant amounts of carbon gas in a dusty disk surrounding a young star named Beta Pictoris. The star and its emerging solar system are less than 20 million years old, and planets may have already formed. The abundance of carbon gas in the remaining debris disk indicates that Beta Pictoris' planets could be carbon-rich worlds of graphite and methane, or the star's environs might resemble our own solar system in its early days. For more information on the Beta Pictoris discovery, visit: [http://www.nasa.gov/vision/universe/starsgalaxies/beta\\_picMM.html](http://www.nasa.gov/vision/universe/starsgalaxies/beta_picMM.html). For more information on FUSE, visit: <http://fuse.pha.jhu.edu>.

## Weekly Status Reports



The International Space Station crew wrapped up its week with post-spacewalk tasks and began to turn their focus toward the arrival of a Progress supply spacecraft and preparations for Discovery's upcoming shuttle mission, designated STS-121. Commander Pavel Vinogradov and Flight Engineer Jeff Williams had a busy weekend with closeout tasks and station configurations after the spacewalk last week. They finished the cleanup and stowage of the Orlan spacesuits and related tools.

The crew members enjoyed light duty days on Monday and Tuesday, resting up after the extended spacewalk and its follow up activities. They resumed a normal work and sleep schedule Wednesday. Another off-duty day for the crew is scheduled for Monday. The crew attempted to reactivate the Russian Elektron oxygen-generating system this week following the replacement of its external hydrogen vent valve during the June 1 spacewalk. After several attempts, the Elektron began operating but failed about seven hours later. Vinogradov checked the vent lines associated with the refurbishment effort during the spacewalk and they appeared to be clear and operating normally.

Another attempt to restart Elektron earlier today proved unsuccessful, leading Russian specialists to believe that the problem is due to a failed power unit. A spare unit was located by Vinogradov and will be installed on Sunday. The crew members have at least a week of oxygen available in the cabin atmosphere before they would need to use supplies out of the ISS Progress 21 cargo ship tanks. The Elektron problem has had no impact on station operations and ample alternate supplies of oxygen are available.

On June 9, the ISS Progress 21 thrusters were used to boost the station by a little less than one mile, placing the complex at the correct altitude for the launch and docking of the next cargo vehicle, ISS Progress 22. That supply spacecraft is scheduled to launch June 24 from the Baikonur Cosmodrome in Kazakhstan, and will dock to the station on June 26 at

the Pirs docking compartment port, which currently houses the older ISS Progress 20. It will be jettisoned on June 19 to make way for the new cargo vehicle.

Other work this week included some final spacewalk tool stowage tasks and the reconfiguration of the station's systems, including the communications system in the Russian Zvezda Service Module and the Pirs airlock. The crew conducted a successful communications test with NASA's Dryden Flight



*Flight Engineer Jeff Williams works on a spacesuit in the Zvezda Service Module of the space station.*

Research Center, Calif., and White Sands Test Facility, N.M., ground sites and performed routine emergency fire drill training.

The next station status report will be issued on Friday, June 16, or earlier if events warrant. For more about the crew's activities and station sighting opportunities, visit: <http://www.nasa.gov/station>.



--June 22, 10 am - 5 pm: *The Vision for Space Exploration: From Vision to Reality*. An interactive, all-day exhibit in the Rayburn Foyer with a reception to follow from 5 pm – 7 pm, also in the Rayburn Foyer. The event is open to all Members and staff.  
--July 1: Launch of Space Shuttle Discovery, STS-121  
--July 20: Mars Viking Anniversary Event in the Rayburn Foyer.

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